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The Significance of Problem Situation Assignments in Teaching the Science of Machine Details

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Abstract: *It is important to determine and select educational goals, principles, content, methods and tools, to develop students' professional formation or professional skills based on problem-based assignments.*

The article reflects the setting of certain requirements by the teacher in relation to the educational activities of students, including the importance of problem-situational tasks, their role in solving pedagogical and production problems.

Keywords: *Machine details, learning objective, principle, content, method, tool, problem situation, professional qualification.*

It is important to teach the science of "Machine details" to engineering students in the process of preparing highly qualified specialists with professional competence who meet the requirements of the time. The main purpose of the subject "Machine details" is to study the calculation and design methods, rules, and norms of machine details based on current standards, to form engineering skills in students. The main task of the course is to learn the skills of calculation and project implementation of details and nodes, to study their structure, working process and fields of application.

It is important to determine and select educational goals, principles, content, methods and tools, to develop students' professional formation or professional skills because of problem-based assignments.

The imposition of certain requirements by the teacher in relation to the students' educational activities enriches their content. The form of giving pedagogical and technical-technological problem-situational tasks is the execution of management tasks and issues that involve making conclusions based on a previously mastered sample.

Problem-situational tasks reflect objective, specific pedagogical and production problems. If the teacher uses the problematic situation to reflect the contradictory features of the studied pedagogical phenomena and the production process, then the objective problem becomes an educational problem. Educational

pedagogic and production process problems, which are understandable for students, are included in the educational task.

Pedagogical and technical-technological problem-situation tasks lead to the decision of various didactic results. It allows create pedagogical and technical-technological problem situations, to manage the educational process, to activate the educational activities of students. Problems serve as a didactic tool that helps to gain deeper knowledge, develop creative skills and abilities.

Almost every educational problem allows to activate the activity of thinking, but not every one of them leads to the independent formation of pedagogical and psychological concepts at the scientific level. Therefore, it is necessary to take into account didactic features of educational problems when developing pedagogical, technical-technological problem-situation tasks.

The rules for developing problem-situational tasks are as follows:

- Problem-situation assignments should have problems related to real pedagogical and production situations;
- provides for the implementation of mental activity that creates the concepts of problem solving, which is the basis of problem-situational assignments, using various methods - analysis, synthesis, comparison, comparison, generalization, etc.;
- problem-situational tasks should objectively show the important connection between events and processes reflected in the content of concepts;
- it is necessary to consider the possibilities of identifying the evidence of problem-situational assignments and creating concepts based on strengthening the connection between events and processes in the minds of students;
- a holistic expression or expression of the execution of problem-situational tasks allows to generate a more complex concept that has not yet been mastered by the subject from several simple concepts that make up the conditions of the task;
- in the process of performing problem-situational tasks, simple concepts or concepts unknown to the subject are compared with each other;
- When performing problem-situational tasks, the subject performs the following actions: re-develops a concept without changing their form and content; changes the form of concepts and redevelops them; uses formal-logical thinking methods from previously acquired concepts and changes them again; new concepts are formed based on theoretical thinking.

In the process of solving problem-situational assignments, the execution of the previous actions is constantly monitored. As a result of their analysis, the student learns the general methods of performing educational tasks.

REFERENCES

1. Азизходжаева Н.Н. Педагогик технология ва педагогик маҳорат. Ўқувқўлланма. – Т.: ТДПУ, 2003. - 174 б.
2. Загвоздкин В.К. Технологии в образовании // Ж. Человек. -1997. -№ 3. – с. 17-20.
3. Крюкова Е.А. Личностно-развивающие образовательные технологии: природа, проектирование, реализация. Монография. – Волгоград. Перемена, 2000. – 97 с.

4. Usubovich, O. O., & Ne'matillaevna, Z. D. (2022, April). INTERFAOL USULLARDAN FOYDALANIB TALABALARNING MUSTAQIL FIKRLASHLARINI SHAKLLANTIRISH. In *E Conference Zone* (pp. 101-105).
5. Отамирзаев, О. У. & Зокирова, Д. Н. (2018). Тажриба машғулотларини мустақил ўрганишга ундовчи таълим бериш орқали олиб бориш. *Современное образование (Узбекистан)*, (3), 45-49.
6. Отамирзаев, О. У. & Зокирова, Д. Н. (2014). Мустақил фикрлашларни шакллантиришга йўналтирилган дарс ишланмаси.
7. Зокирова, Д. Н. (2021). Талабаларга Мустақил Ўрганишга Ундовчи Таълим Беришда Касбий Ва Умумтаълим Фанларининг Интеграцияси. *Современное образование (Узбекистан)*, (6 (103)), 24-28.
8. Химматалиев, Д. О., & Зокирова, Д. Н. (2022). НАЗАРИЙ ЭЛЕКТРОТЕХНИКА ФАНИНИ ТАЪЛИМ ТЕХНОЛОГИЯЛАРИ ТАРКИБИ АСОСИДА РЕЖАЛАШТИРИШ ВА УЛАРДАН ФОЙДАЛАНИШ. *Eurasian Journal of Academic Research*, *2*(3), 630-638.

